

97-84156-15

Williams, William Henry

Financing modern warfare

Washington

[1917]

97-84156-15

MASTER NEGATIVE #

COLUMBIA UNIVERSITY LIBRARIES  
PRESERVATION DIVISION

**BIBLIOGRAPHIC MICROFORM TARGET**

ORIGINAL MATERIAL AS FILMED - EXISTING BIBLIOGRAPHIC RECORD

Williams, William Henry, 1874- Financing modern warfare, by W. H. Williams ...  
A paper read at the twenty-ninth annual meeting of the Association of American  
Railway Accounting Officers, Chicago, Illinois, September 26, 1917.  
Washington, Association of American Railway Accounting Officers [1917] 26p.

**RESTRICTIONS ON USE:** *Reproductions may not be made without permission from Columbia University Libraries.*

**TECHNICAL MICROFORM DATA**

FILM SIZE: 35mm

REDUCTION RATIO: 10:1

IMAGE PLACEMENT: IA ☒ IIA IB IIB

DATE FILMED: 8/7/97

INITIALS: TLM

TRACKING # : 26470

FILMED BY PRESERVATION RESOURCES, BETHLEHEM, PA.

Williams

# FINANCING MODERN WARFARE

BY W. H. WILLIAMS

*Vice-President, Delaware & Hudson Co.  
and Chairman, Board of Directors, Wabash Railway Co.*

A paper read at the Twenty-Ninth Annual Meeting of the Association of American Railway Accounting Officers,  
Chicago, Illinois, September 26, 1917.

308

2

Box 662

LIBRARY OF CONGRESS CARD A17-1493

PUBLISHED BY  
ASSOCIATION OF AMERICAN RAILWAY ACCOUNTING OFFICERS  
1116 AND 1118 WOODWARD BUILDING  
WASHINGTON, D. C.

## FINANCING MODERN WARFARE

W. H. Williams.

### AMERICA'S SHARE.

Somewhat purse-proud and *nouveau riche*, yet having, not unreasonably, high confidence in the security of their possession of wealth aggregating, exclusive of real estate, about \$80,000,000,000, the people of the United States are suddenly told that they must within a year devote some \$18,000,000,000 to purposes of warfare. It is a sum equal to 9 per cent of all their possessions and equal to 22 per cent, or almost one-quarter, of all their personal property. It is a sum twenty-five times as great as the total expenditures of the Federal Government in any pre-war year, except during the Civil War, about fourteen times the highest year's expenditures of that war, and approximately three-fourths of the total cost of all the railways of the United States. It is nearly 80 per cent greater than the highest amount that the United Kingdom of Great Britain and Ireland has disbursed in any year of the present war; it means an average contribution of \$180 from every child, woman and man in the entire population and of about \$720 from every family.

These enormous aggregates must give pause to the least cautious. That such sums are required almost at the moment at which the United States have entered the war and before their military forces are fully assembled even for the long period of preliminary training, suggests possibilities as to the ultimate aggregate that stagger the imagination. While all hopes center upon a speedy conclusion of the war and the return of peace, none should be so blind as to fail to recognize that it may be prolonged for years. The demands upon Germany which the United States and their *quasi* allies, the Entente powers, consider essential to a peace that shall be stable and, therefore, worth while or so extensive that the proud and war-worn nation cannot be expected to acquiesce save under stress of the utmost compulsion. When one recalls how the beleagured burghers of Leyden cast over the walls of their city the last remaining loaves, and yet held out until, half-

AUG 23 1944 PCF

starving, they finally avoided defeat, one is not sure that before the allied armies occupy Berlin, Munich and Vienna the German people will consent to abandon their former colonies; to surrender and rebuild Belgium, Roumania and Serbia; to restore Alsace and Lorraine; to diminish and restrict their army; to dismantle or dispose of much of their naval equipment; and to neutralize the Kiel canal. Yet, though these may not be the precise terms of peace on which the Entente allies are determined to insist, there can be no doubt that the war must go on until terms almost, if not quite, equally drastic are admitted. America's financial preparations must, therefore, be taken in such form and measure that financial power cannot be exhausted even should the war last five or more years beyond the present date. To that end a few facts must be squarely envisaged and courageously examined.

FIRST. The costs of warfare inevitably increase as the duration of the particular war lengthens. No one can suggest that France has not put forward her utmost energies from the firing of the first gun, yet her average monthly expenses have increased as follows:

| Period.                        | Average per month.              |                   |               |
|--------------------------------|---------------------------------|-------------------|---------------|
|                                | Strictly military expenditures. | Interest on debt. | Total.        |
| 1914, August 1 to December 31. | \$234,690,039                   | \$2,413,271       | \$237,103,310 |
| 1915.....                      | 262,758,251                     | 31,667,061        | 294,425,312   |
| 1916.....                      | 394,550,883                     | 54,446,450        | 448,997,333   |
| 1917, to September 30*.....    | 456,419,678                     | 71,551,854        | 527,971,532   |

SECOND. America will have to carry her financial burden without an iota of assistance from neutrals or belligerents anywhere. Great Britain and France could look largely to the United States and very materially to their own dependencies for financial aid; the United States must help themselves, for none is left to give them aid.

The best statistics available indicate that from the beginning of the war to the end of the calendar year 1916 Great

\* The Minister of Finance, when submitting a measure appropriating \$2,430,000,000 (12,150,000,000 francs) for the fourth quarter of 1917, at the rate of \$810,000,000 per month, gave \$593,800,000 as the monthly average for the whole of 1917. Apparently, this figure does not include interest on indebtedness.

Britain had devoted to war purposes of all sorts (including assistance to her allies) a sum equal to 15.97 per cent of her total wealth when the war began; France had given 18.77 per cent of her wealth; Germany, 18.25 per cent of hers. Compared with the estimated annual income prior to the war, the average annual expenditures of Great Britain during the same period had been 52.87 per cent of the annual income; France, 67.31 per cent; Germany 57.54 per cent. The average annual expenditures of Great Britain had been 3.17 times the former annual savings of her people; those of France 4.04 times annual savings; those of Germany 3.45 times annual savings.\*

The rule of alliances in war is necessarily "from each according to his ability." The financial problem of America is to conserve her financial ability for the arduous requirements of a prolonged contest, in which, if America fails, there will be none to take up the burden. The certainty that the contest for liberty will fail if America fails is the imperative to caution. Should the war last five years longer and should America be able to give as large a proportion of her total wealth, year by year, for five years as Great Britain gave in the first two and one-half years, this country would contribute over \$60,000,000,000, but if France set the measure it would be over \$76,000,000,000. If in the fifth year of the war the people of the United States should spend in proportion to their annual savings as much as Great Britain spent annually, on the average, to the end of 1916, the cost in the single year to this country would exceed \$30,000,000,000; or, if America spent in the same ratio to savings as France, the amount would exceed \$40,000,000,000. It may be that the financial condition of the United States would make it impossible for their people to reach these heights of sacrifice. But it would be wanton folly not to note at the beginning that such extreme demands may arise; that if they do arise they must be met to the utmost limit of self-denial and of possibility; that every financial step must be so cautiously taken that it may raise no barrier against these future tasks, may fix no diminished limit upon our financial power.

This country should be able to learn much from the study of the financial methods of the other nations that are at war.

#### WAR FINANCE OF OTHER NATIONS.

It is estimated that the total war expenditures of the Entente

\* More complete data will be found in the Appendix.

and Central Powers, from August 1, 1914, to December 31, 1916, amounted to \$61,769,000,000. At the rate of \$100,000,000 per day (a low estimate) for the 212 days necessary to make up the first three years of the Great War, the aggregate outlay for that period must have been—

\$82,969,000,000

and this sum includes nothing for the wastage and destruction of pre-existing wealth.

#### GREAT BRITAIN.

England is always conservative in financial affairs and has pursued a policy of extreme caution in the avoidance of unnecessary increases in national debt and in the payment of the heaviest possible proportion of the cost of the war by taxation. Yet England has relied upon loans far more than is admitted by those who in this country advocate resort to such rigorous taxation that it would inevitably dry up the very sources of supply.

From August 1, 1914, to July 28, 1917, almost three years, Great Britain expended \$25,680,824,150 (£5,136,164,830) of which \$6,214,805,250 (£1,242,961,050), or 24.20 per cent, was raised by taxation and \$19,466,018,900 (£3,893,203,780), or 75.80 per cent, by borrowing. This is the crude computation which is commonly made. It ordinarily leads to the assertion that Great Britain has paid one-quarter of her war expense by taxation. But for that purpose it is incorrect and misleading.

England did not do away with her peace establishment when war began; she has not done away with it. The regular expenses of the peace establishment and the ordinary revenues of the Government must, therefore, be deducted both from the outgo and income before it is possible to ascertain what part of the additional expenses due to the war has been met by additional revenues secured by taxation. But that is not all. The interest on the war debt absorbs a very large part of the additional taxation revenue, and this, too, must be deducted before the amounts that are devoted out of taxes to the prosecution of the war can be accurately stated. Also the loans to allies and dependencies must be taken out of the expenses, for the borrowers are considered to be solvent and are expected to make repayment in accordance with the conditions of the loans. The calculations necessary follow:

#### BRITISH GOVERNMENT, AUGUST 1, 1914, TO JULY 28, 1917.

##### Expenses.

|                                              |                  |
|----------------------------------------------|------------------|
| Total expenditures, all purposes.....        | \$25,680,824,150 |
| Deduct (close approximations):               |                  |
| Expenses of regular peace establishment..... | \$2,970,000,000  |
| Loans to allies and dependencies.....        | 5,855,000,000    |
| Interest on war debt.....                    | 990,875,865      |
|                                              | 9,815,875,865    |

Amount devoted to actual prosecution of war... \$15,864,948,285

##### Taxes.

|                                              |                 |
|----------------------------------------------|-----------------|
| Total, all sources.....                      | \$6,214,805,250 |
| Deduct:                                      |                 |
| Expenses of regular peace establishment..... | \$2,970,000,000 |
| Interest on war debt.....                    | 990,875,865     |
|                                              | 3,960,875,865   |

Amount raised by taxation for actual prosecution of war... \$2,253,929,385

The foregoing affords the truest comparison that is practicable. It shows that Great Britain's direct expenditures for the prosecution of the war have amounted to \$15,864,948,285, of which \$2,253,929,385, or 14.21 per cent, has been raised by taxation.

The following table shows the expenditures and the revenues of the period from August 1, 1914, to March 31, 1915; the fiscal years 1916 and 1917, and the budget estimates for the year which will end with March 31, 1918:

| Period.                                    | Expenditures.    | Revenue.        |                           |
|--------------------------------------------|------------------|-----------------|---------------------------|
|                                            |                  | Amount.         | Per cent of expenditures. |
| Aug. 1, 1914, to March 31, 1915.....       | \$2,491,799,900  | \$858,793,720   | 34.46                     |
| Year ended March 31, 1916.....             | 7,795,791,885    | 1,683,834,120   | 21.60                     |
| Year ended March 31, 1917.....             | 10,990,563,550   | 2,867,137,910   | 26.09                     |
| Year ended March 31, 1918 (estimated)..... | 11,451,902,000   | 3,193,000,000   | 27.88                     |
| Total.....                                 | \$32,730,057,335 | \$8,602,765,750 | 26.28                     |

To obtain the true proportion of revenue to war expenditures, it is necessary to diminish the foregoing figures by \$990,000,000 per year, or \$82,500,000 per month, for both expenditures and revenues, these sums representing the cost of the peace establishment, always raised by taxation. By that means the following results are produced:

| Period.                              | War expenditures. | Revenue.        |                               |
|--------------------------------------|-------------------|-----------------|-------------------------------|
|                                      |                   | Amount.         | Per cent of war expenditures. |
| Aug. 1, 1914, to March 31, 1915..... | \$1,831,799,900   | \$198,793,720   | 10.85                         |
| Year ended March 31, 1916.....       | 6,805,791,885     | 693,834,120     | 10.19                         |
| Year ended March 31, 1917.....       | 10,000,563,550    | 1,877,137,910   | 18.77                         |
| Year ended March 31, 1918.....       | 10,461,902,000    | 2,203,000,000   | 21.06                         |
| Total.....                           | \$29,100,057,335  | \$4,972,765,750 | 17.09                         |

Interest on the new debt created in connection with the Great War is, of course, rapidly increasing. For the fiscal year 1915 it was \$10,860,000; for 1916, \$199,555,270; for 1917, \$537,335,595; and the estimate for 1918 is \$972,500,000. These figures will have to be deducted from the foregoing if it is proposed to ascertain just how much is being currently raised by taxation for actual current expenditures in the provision and utilization of the military forces. The results of such deductions are shown below:

| Period.                              | Expenditures for current military purposes. | Revenue.        |                           |
|--------------------------------------|---------------------------------------------|-----------------|---------------------------|
|                                      |                                             | Amount.         | Per cent of expenditures. |
| Aug. 1, 1914, to March 31, 1915..... | \$1,820,939,900                             | \$187,933,720   | 10.32                     |
| Year ended March 31, 1916.....       | 6,606,236,615                               | 494,278,850     | 7.48                      |
| Year ended March 31, 1917.....       | 9,463,227,955                               | 1,339,802,315   | 14.16                     |
| Year ended March 31, 1918.....       | 9,489,402,000                               | 1,230,500,000   | 12.97                     |
| Total.....                           | \$27,379,806,470                            | \$3,252,514,885 | 11.88                     |

As each year has produced large additions to the interest on the war debt, it is important to inquire how far increased taxation has kept pace with this increase in commitments. In the following table each total represents the growth over the next previous fiscal year.

| Year ended March 31. | Increase as compared with next previous year. |               |
|----------------------|-----------------------------------------------|---------------|
|                      | Interest on new war debt.                     | Revenue.      |
| 1915.....            | \$10,860,000                                  | \$142,255,915 |
| 1916.....            | 188,695,270                                   | 550,363,720   |
| 1917.....            | 337,780,325                                   | 1,183,303,790 |
| 1918.....            | 435,164,405                                   | 325,862,090   |

It must have been with great reluctance, and only under pressure of rigorous circumstances, that the Chancellor of the Exchequer came forward with a budget which, on its face, made provision for only three-fourths (exactly 74.88 per cent) of the added interest charges which it included.

It is easy to say that Great Britain exacted too much in taxation in the second and third years of the war. Had the fact that the war might continue as it has continued, and with ever-increasing costs, been recognized at the beginning, there can be no doubt that the eminently wise financiers of England would have chosen the safer policy which would have laid a sound foundation of moderate and well organized taxation, that would have been capable of expansion to meet the increasing interest on necessary war loans and a steadily but slowly rising proportion of the other added expenses, while at the same time tending strongly to arrest waste and to encourage, if not to compel, frugality. Failing the adoption of such a policy, England is on the very verge of being unable to sustain additional credit by the showing of a safe margin of new revenue over new interest charges.

From the point of view of after-the-event knowledge, Great Britain erred, moreover, not only in the excessive taxation imposed in the early stages of the war but, even more seriously, in the manner in which the tax burdens were imposed. The following table compares the tax revenues of the United Kingdom for the late fiscal year prior to the war (the twelve months that ended with March 31, 1914) with the year which ended with March 31, 1917:

| Source of revenue.                 | 1914.         | 1917.           | Change.         |              |
|------------------------------------|---------------|-----------------|-----------------|--------------|
|                                    |               |                 | Increase.       | Decrease.    |
| Customs .....                      | \$177,350,000 | \$352,805,000   | \$175,555,000   | .....        |
| Excise .....                       | 197,950,000   | 281,900,000     | 83,950,000      | .....        |
| Legacies and successions .....     | 136,795,000   | 156,160,000     | 19,365,000      | .....        |
| Stamp taxes .....                  | 49,830,000    | 39,390,000      | .....           | \$10,440,000 |
| Land taxes .....                   | 3,500,000     | 3,200,000       | .....           | 300,000      |
| House duties .....                 | 10,000,000    | 9,700,000       | .....           | 300,000      |
| Income tax .....                   | 236,245,000   | 1,025,165,000   | 788,920,000     | .....        |
| Land value taxes .....             | 3,575,000     | 2,605,000       | .....           | 970,000      |
| Excess profits and munitions ..... | Nothing       | 699,600,000     | 699,600,000     | .....        |
| Total .....                        | \$815,145,000 | \$2,570,525,000 | \$1,767,390,000 | \$12,010,000 |

It will be seen that a net increase in taxation of \$1,755,380,000 resulted from the expansion of the amounts obtained from each of four sources of taxation and the addition of one new tax, in part offset by decreases in the receipts from four sources of tax revenue. And it will be noted that all the increases were in taxes not directly felt by the masses of the people and, consequently, having no direct effect upon the expenditures of the masses. This is not sound war-time finance. A sound system of war-time finance should rest upon full realization of the fact that every period of warfare is necessarily a period of abnormal activity in certain lines of industry and of intense demand for the residue of labor that remains after the fighting ranks have been filled. The existence of demands for commodities far in excess of the capacity of the capital and labor remaining in productive employments and the inevitable inflation create a general humor of extravagance which is not often restrained, but is often impelled to almost hysterical extremes, by the immense uncertainties which the future seems to hold. "Eat, drink and be merry, for tomorrow we die," the spirit which inspired the Decameron of Boccaccio, and placed alongside the Reign of Terror of the French Revolution a reign of extraordinary frivolity, becomes the guiding principle of great masses, many of whom are for the first time in possession of funds sufficient for extravagance.

It is, then, the business of the statesman who is called upon to formulate a system of war-time taxation to adapt the new taxes to the penalization of waste and the stimulation of frugality. This is just what the British Government conspicuously

failed to do. And it is precisely what the politicians who are in control in the United States seem utterly reluctant to attempt. There is a cynical French saying to the effect that—

"The art of taxation is the art of plucking the most feathers from the goose with the least squealing."

Those who formulated the English and American taxes on incomes (conveniently exempting the incomes of nine-tenths of the voters), on legacies and successions and on "excess" profits have shown immense proficiency in this politician's art; they have shown little liking for the statesman's task of formulating governmental policies of lasting benefit to the masses of the governed. The system adopted in Great Britain and the system which Congress seems likely soon to adopt have many features in common, the most significant being the complete absence of any tendency to restrain waste. The *Economist* (London) is a reliable and conservative authority as to what has transpired in England. I quote from its issue of August 4, 1917:

"With the future of the world at stake and the greatest need that ever was for a united effort on the part of all who believe in liberty and progress and hate the possibility of a future devoted to the development of ingenuity in destruction, our fashion and frippery shops are busier than ever, and all the machinery of amusement and self-indulgence is in full swing.

"The national conscience on the subject of saving and spending has backslid badly in the last six months, and the 'business as usual' spirit is among us again, with all its accompaniments of stupid and unpatriotic extravagance, which forgets war saving and leaves the war to be financed by inflation and the manufacture of bank credits."

The stubborn determination of England has doubtless saved civilization from enormous retrogression. It is greatly to be regretted that English political leaders have not, with equal courage, adopted the unpopular expedients of taxation which would have greatly diminished the ultimate cost of the English effort to the English masses.

#### FRANCE.

France, at the outbreak of hostilities in 1914, was in no condition to pursue a policy of rigorous taxation. At that date the Government of the Republic was about to attempt the flotation of an issue of bonds sufficient to cover most of the

cost of its (then) recent adventures in Morocco, the increases in its naval establishment and the introduction of the three-year period for military service. Moreover, the first shock of the war fell, after Belgium, upon French industry, so that the yield of the established system of taxation was immediately and seriously diminished. The following table compares by periods the estimated normal yield of the pre-war taxes with the actual yield:

| Period.                            | Normal yield.   | Actual yield.   |                    |
|------------------------------------|-----------------|-----------------|--------------------|
|                                    |                 | Amount.         | Per cent of total. |
| 1914, August 1 to December 31..... | \$336,746,000   | \$193,732,600   | 57.54              |
| 1915, January 1 to July 31.....    | 461,919,000     | 366,657,800     | 79.38              |
| 1915, August 1 to December 31..... | 338,680,800     | 268,849,200     | 79.38              |
| 1916, January 1 to July 31.....    | 473,151,600     | 420,100,400     | 88.79              |
| Total.....                         | \$1,610,497,400 | \$1,249,340,000 | 77.57              |

The resumption of economic activity indicated by the foregoing influenced the Finance Ministry late in 1916 to favor gradual extensions of taxation, and early during the current year new taxes were voted, including a moderate income tax, the first to be collected in France since the days of Louis XVI. The estimated annual revenue from the new taxes is \$120,000,000 (600,000,000 francs), and the Chamber of Deputies has now under consideration still further additions to the tax system which would produce, it is estimated, \$240,000,000 (1,200,000,000 francs) per year.

From August 1, 1914, to July 30, 1917, the total of all French votes of credit was \$18,207,918,219 (91,039,591,092 francs), the last credit included being intended to cover expenditures to the end of September, 1917.\* The distribution of the funds thus supplied, among different activities of the state, is shown below:

\* On September 18, the Chamber of Deputies began consideration of a new credit of \$2,430,000,000, intended to provide for the quarter to end with December 31, 1917. The total is thus raised to \$20,637,918,219.

| Period.                            | Strictly military expenditures. | Interest on debt. | Other expenditures. |
|------------------------------------|---------------------------------|-------------------|---------------------|
| 1914, August 1 to December 31..... | \$1,173,450,196                 | \$12,066,353      | \$132,370,301       |
| 1915, August 1 to December 31..... | 3,153,099,008                   | 380,004,734       | 1,027,793,563       |
| 1916, August 1 to December 31..... | 4,734,610,597                   | 653,357,402       | 1,138,524,972       |
| 1917, to September 30..            | 4,107,777,098                   | 643,966,687       | 1,050,897,308       |
| Total.....                         | \$13,168,936,899                | \$1,689,395,176   | \$3,349,586,144     |

It is not yet practicable to supply a complete record, but it appears that French expenditures for governmental purposes, to the end of 1916, aggregating, in round figures, \$11,500,000,000, were provided for as follows:

|                                    | Amount.          | Per cent of total. |
|------------------------------------|------------------|--------------------|
| Consolidated debt.....             | \$4,325,200,000  | 37.62              |
| Floating debt:                     |                  |                    |
| Bons de la Defense National.....   | 2,318,200,000    | 20.17              |
| Bonds sold in other countries..... | 792,000,000      | 6.89               |
| Other.....                         | 32,000,000       | .28                |
| Advances by Bank of France.....    | 1,720,000,000    | 14.96              |
| Advances by Bank of Algeria.....   | 24,000,000       | .21                |
| Short-term debt.....               | 418,800,000      | 3.64               |
| Total borrowed.....                | \$9,630,200,000  | 83.77              |
| Budget receipts.....               | 1,865,600,000    | 16.23              |
| Total expended.....                | \$11,495,800,000 | 100.00             |

The budget receipts, shown in the foregoing, have certainly not more than met the ordinary expenses which have no relation to the war, and it appears, therefore, that to the end of 1916 France not only borrowed 100 per cent of her actual war expenses but in addition the sum necessary to keep up the interest on her accumulating war debt. As the interest on the war loans is at the rate of 5 per cent, it is apparent that even

the new and proposed taxes, estimated to produce \$360,000,000 per annum will not (even if all the proposals are enacted) suffice to keep up the interest on the war debt.

France has floated two issues of bonds, which may be looked upon as permanent financing. Both pay 5 per cent. The first was issued in 1915 at 88 per cent and the second in 1916 at 87½ per cent. The total of the first was \$2,398,458,000 (11,992,290,000 francs) and of the latter \$1,940,674,200 (9,703,371,000 francs). There were conversion privileges in connection with both loans which permitted conversions of pre-war bonds issued at lower rates of interest, so that there is no relation between the total of these issues and the amounts secured for actual war purposes. The cash received from the first loan was \$1,127,275,000; from the second, \$1,057,668,000; total, \$2,184,943,000.

Under ordinary circumstances such financing would have been without justification. But the circumstances were not ordinary, the conditions controlled imperatively and the whole world must rejoice that the great nation which has so vastly and unjustly suffered has been able in any way to draw upon domestic resources to the amazing extent shown by the figures. Financiers may not criticize methods which have served under such arduous conditions but may be permitted to marvel at the patriotism and inherent financial strength of the people which have permitted these results. As a part of the amazing process, the Bank of France has increased its note issue, so that today it stands at an excess over \$4,000,000,000 and has augmented its advances to the Government so that they amount to \$2,140,000,000 and in addition has discounted treasury bonds in the sum of \$549,000,000, the proceeds being loaned by France to its allies.

#### GERMANY.

The German Government was not impelled to unsound financial methods by irresistible pressure of uncontrollable circumstance but voluntarily chose what it evidently considered the path of least resistance, confident, as is generally understood, that it was the possessor of such military superiority that it could rely upon immediate and overwhelming victory. Indemnities sufficient to defray the whole cost of its military operations could, it was thought, be exacted from its adversaries as the price of peace.

From August, 1914, to July, 1917, the war credits supplied

to the German Government aggregated \$23,000,000,000, the sum probably being expected to cover all necessary expenditures for war purposes to some time in November next. Six war loans have been effected, and the flotation of a seventh is now in progress. Data concerning the loans already effected follow:

| Date of issue     | Imperial loan:    |                  |             | Treasury bonds: |                  |             | Total            |
|-------------------|-------------------|------------------|-------------|-----------------|------------------|-------------|------------------|
|                   | Amount subscribed | Rate of interest | Issue price |                 | Rate of interest | Issue price |                  |
| 1914, Sept. . . . | \$ 870,250,000    | 5                | 97½         | \$ 250,000,000  | 5                | 97½         | \$ 1,120,250,000 |
| 1915, March. . .  | 2,082,500,000     | 5                | 98½         | 193,750,000     | 5                | 98½         | 2,276,250,000    |
| " Sept. . . .     | 3,040,750,000     | 5                | 99          | .....           | .....            | .....       | 3,040,750,000    |
| 1916, March. . .  | 2,298,750,000     | 5                | 98½         | 398,000,000     | 4½               | 95          | 2,696,750,000    |
| " Sept. . . .     | 2,394,500,000     | 5                | 98          | 368,250,000     | 4½               | 95          | 2,662,750,000    |
| 1917, March. . .  | 3,192,500,000     | 5                | 98          | .....           | .....            | .....       | 3,192,500,000    |
| Total. . . . .    | \$18,879,250,000  |                  |             | \$1,106,000,000 |                  |             | \$14,984,250,000 |

Owing to conversions and other disturbing elements, it would not be accurate to consider the total of \$14,984,250,000, shown in the foregoing, to be the amount of the war expenses of Germany which has been permanently provided for. The total of these loans, however, is equal to 65.15 per cent of the \$23,000,000,000 which has been expended for war purposes. The actual floating debt no doubt exceeds the 34.85 per cent of war cost which would remain if the aggregate of the six bond issues were still outstanding. Germany has not increased her tax revenues enough to anywhere nearly cover the interest on her war debt. In some degree the extent of German inflation can be measured by the outstanding note issues of the Imperial Treasury and the Reichsbank. The data follow:

| Date.                  | Reichsbank notes in circulation. | Treasury and loan notes in circulation. | Total.          |
|------------------------|----------------------------------|-----------------------------------------|-----------------|
| 1914, July 23. . . . . | \$373,000,000                    | \$34,500,000                            | \$407,500,000   |
| 1917, July 23. . . . . | 2,157,500,000                    | 1,222,000,000                           | 3,379,500,000   |
| Increase:              |                                  |                                         |                 |
| Amount. . . . .        | \$1,784,500,000                  | \$1,187,500,000                         | \$2,972,000,000 |
| Per cent. . . . .      | 478.42                           | 3,442.03                                | 729.33          |

\* Includes Exchequer bonds (amount not stated) issued at 98 and carrying 4½ per cent interest.

It would seem as though an eightfold increase in the paper in circulation should give pause to the most reckless official financiers, but in addition to the foregoing the German Government has prosecuted an intensive campaign to stimulate the use of checks and the effect of the changes in commercial practice brought about thereby is undoubtedly considerable. Data to measure its extent are not, however, available at this time. It should be remembered also that at the beginning of the war the notes of the Reichsbank ceased to be redeemable in gold; the requirements as to the reserve supporting such notes were greatly moderated, and provision was made for an entirely new set of note-issuing banks, the Darlehnskassen, with authority to issue up to \$750,000,000 (3,000,000,000 marks). Reichsbank notes are now issued in denominations of \$2.50 (10 marks) and Darlehnskassenscheine in denominations of 25 cents (1 mark); until 1906 the smallest Reichskassenscheine was \$25 (100 marks).

It is not to be overlooked that in her financial isolation during the war the position of Germany has been much like that of the United States at present. In other words, the effect, compulsory self-reliance, was the same, although the cause in the case of Germany was the enmities she had evoked, while in the case of America the source of equal isolation is the financial condition approaching to exhaustion of all her friends. Though no American could favor the reckless borrowing of Germany, it has after all served the purpose of financing an unexpectedly prolonged and progressively disappointing contest. It is not certain that a different plan would have served as well.

#### A FEW FUNDAMENTALS.

The restatement of fundamentals which are known to all but frequently disregarded by many, often assists and simplifies discussion.

The primary factors of production are:

1. Labor.
2. Land.
3. Capital.

In this classification labor signifies human labor and includes the higher forms of effort, such as are involved in the planning and management of enterprises as well as mere manual labor. Land signifies the portion of the earth's surface and the natural resources utilized by the human laborer during the period

of production. All animals, tools, machines, labor-saving contrivances of all sorts, stores of food, clothing and shelter for the workers during the period before production can be made complete, etc., constitute capital. All capital is wealth, but not all wealth is capital, for only those goods that are used or useful for producing other goods can be called capital, while wealth includes all goods in existence. For example, the house which shelters a farmer or a farm laborer is both capital and wealth, but the house which shelters an idler or one who obtains a livelihood by gambling is wealth but is not capital. A merchantman is capital, but a man-of-war is not; gunpowder for use in mining is capital, but gunpowder for warfare is not; money held in reserve to pay wages of railway employes is capital, but money reserved to pay soldiers is not.

Although there cannot be production without both labor and land, there can be production, albeit most tedious, painful and difficult production, without capital. Outside the tropics, however, the production of the minimum requisites of bare subsistence without capital would be so difficult and human existence without permanent shelter so nearly impossible that it is certain that humanity could not long exist without some capital. In short, if the productive capacity of land and labor should suddenly cease to be multiplied by capital, as both are now multiplied wherever the methods of civilization prevail, the great majority of the world's present population would perish quickly from exposure and starvation, the balance would lead lives of extreme privation, and modern civilization would soon be no more.

Capital multiplies the opportunities of labor and vastly increases the fecundity of both labor and land. Thus the rich soils of the Dakotas were not open for profitable cultivation until capital built railways to move their products to the East, and without other capital in the form of agricultural implements they would now produce but scanty harvests. Without capital in the form of facilities for transportation, the whole population of the United States could not have moved the anthracite production of last year as much as 10 miles, but, on the other hand, without capital in the form of stoves and furnaces it would have been worth no man's while to dig a single ton.

Capital is obtained by abstinence and effort. Waking at sunrise of a June day the savage may be presumed to have thought first of obtaining food. This he could accomplish

without capital (tools or weapons) by robbing the nest of some fowl of the woodland or by capturing a fish from an adjacent stream or by seizing some small animal which he could slay with bare hands. If he preferred his food cooked and the preference happened to overcome his distaste for effort, he could rub dry sticks together until one of them took fire (it is worth noting, while considering the beginnings of culture, that he commonly satisfied his liking for cooked food and avoided the discomfort of effort by compelling his wife, or one of his wives, to build the fire, prepare the carcass and cook the food).

For a million years a million savages did this and nothing more, and the world made no progress toward civilization. But one day a surpassing genius of his time and tribe conceived the revolutionary idea of shaping a flint stone into a spearhead and a sapling into a shaft, and, voluntarily extending his hours of toil, he contrived, slowly and painfully, a spear for hunting or fishing—the first tool, the beginning of capital. Or perhaps it was not a spear but an hoe or an axe (not a battle-axe) that the unprecedented genius first achieved. But whatever it was, it was the first capital, and when his tribe, recognizing the qualities and benefits of leadership, made him chief and determined to serve and obey him, it but meagerly paid for an immeasurable benefit; it paid in but a fleeting moment for a benefit which has and will become increasingly greater until time itself shall end.

Whoever today consumes all that he creates adds nothing to the world's store of capital and gives no added impulse, however slight, to its material progress. Whoever saves out of his income, adds to the store of labor-saving capital, augments the potentiality of labor, increases and extends human comfort and accelerates racial progress.

It is clearly desirable that war should be paid for as far as possible out of the results of an intensified frugality, rather than by diverting normal savings to war purposes and thus preventing accumulation during the war period. That is to say, it is eminently desirable that the period of warfare should be a period of unusually rigorous economy, so that the process of storing up capital need not be wholly interrupted.

It was doubtless out of a strong conviction of the truth and importance of this principle that from the very outset of America's participation in the present war President Wilson has taken every opportunity publicly to proclaim the necessity of private and public economy. For example, in a proclamation issued in April last he said:

"This is the time for America to correct her unpardonable fault of wastefulness and extravagance.

"Let every man and every woman assume a duty of careful and provident use of expenditure as a public duty and as the dictate of patriotism, which none can now expect ever to be excused or forgiven for ignoring."

Taxation is a recognized and potent agency of regulation. If the masses are wasteful in time of war, their selfish indulgence can be curtailed by taxes laid upon consumption. If the wealthy lure men from productive to unproductive occupations, they can be impelled by proper devices of taxation to serve themselves and to relinquish to more profitable employments the labor they have wrongfully engrossed. If war is to be made efficient by saving, these expedients must be adopted.

On the other hand, it should be understood that in so far as taxes upon incomes are paid by those receiving the highest incomes (that is to say, in their most popular form), their amounts are directly deducted from savings. For the recipients of these incomes lack capacity to consume very much more than those with smaller incomes, and in each case the residuum goes naturally into the country's store of capital.

Likewise, in the case of taxes on "excess profits" or "war profits" or "undistributed profits" the amounts taken in taxes are almost, if not always, wholly deducted from funds that would otherwise be saved. This will be the case where the tax falls on differential profits; in other cases the tax is very likely to be added to the price. It is then paid by the consumer and, if the Government, which has imposed the tax, is also the consumer, it merely pays its own taxes—that is to say, the cost of government is increased by the amount of the tax, usually plus a charge for this employment of the tax fund.

It should be recognized that war does not destroy capital to anything like the extent commonly assumed. Capital in the form of factories, buildings, improvements to farms, etc., etc., is largely destroyed in the immediate areas of war operations, and in this war the destruction of capital in the form of merchant vessels has been extraordinary. But on the whole the proportion of the pre-existing capital which has been consumed or destroyed will not be found to be very great. What war may do is—

1. To prevent the repairs and replacements of capital necessary to keep the aggregate undiminished—that is, to make up the wear and tear of use. In a prolonged war this destruction may be very great, especially as the necessities of the situation

may lead to the abuse of facilities for production, as Germany is understood to have abused and injured her railways. Baron Helfferich is reputed to have estimated the loss of German capital as equal to 20 per cent; and

2. To divert to warfare and the production of war supplies the energy that would otherwise go to the production of additional capital.

The problem of war finance is only in a very narrow sense a problem of drawing upon pre-existing capital. What war requires, when conducted on such an immense scale as that of the war now in progress, is the utilization during the war period at the highest pitch of intensity that can be attained of all the resources of man-power which are capable of fighting or of producing fighting materials and all the resources of capital that are capable of arming, feeding or moving the military forces and the military supplies, and, as under modern conditions such resources are commanded only by the payment in money of wages and interest—prices paid for supplies are in part the wages of the producers and in part the interest on the capital utilized—it is necessary that the warring government should have money in unprecedented volume. To this end they must tax and borrow in expedient proportions. They must tax at least enough to provide for the interest on the new borrowings, with a liberal margin of safety, as, if they fail to do this, their credit will deteriorate until, like Germany, their so-called borrowing is really a commandeering of wealth. But it is generally true, as Mr. Loree has said, that—

"Loans have all the manifest advantages which moral suasion has over compulsion, which an appeal has over a demand, which the promise of a reward has over the threat of a penalty. The patriotic impulse to purchase a bond will make deeper inroads upon the property of almost any citizen and retain its efficiency much longer than realization of the patriotic duty to submit to grinding taxation." *New York Times*, August 15, 1917.

If Citizen Smith has \$10,000 which the Government has decided to take for war expenses, it can take it in one of two ways or by using each of them as to a separate portion of the sum. These ways are—

1. Taxation.
2. Sale of bonds.

If Citizen Smith is taxed \$10,000, he feels at least \$10,000 poorer than he would feel if the tax had not been exacted, and, moreover, he has \$10,000 less on which to be taxed thereafter or with which to meet future tax exactions. If, on the other hand, Citizen Smith buys a \$10,000 bond, he feels no poorer

than he did before; he has, perhaps, substituted a wise investment for an extravagant, or at least an unnecessary, expenditure, and he has a \$10,000 security on which any bank will loan him enough to buy, say, \$8,000 of the next bond issue. This may be inflation, but if it is, it is an inflation which smooths the hard places and vastly aids in liquifying the financial resources and making them available for the energetic and effective prosecution of the war. Moreover, the payer of a heavy tax often feels that he is the victim of government; the buyer of a bond is drawn to patriotism by the warming consciousness of benefits conferred.

If it is argued that "the generation which makes war should meet its costs," one may well reply that the ordinary length of a generation is not less than thirty-three years and that the deadening tax burden may well be postponed to the decade following the war, when its blight will not fall upon a time requiring extraordinary productivity. It is passing strange that in the present emergency there should appear in some quarters such an amazing zeal to tax to the limit of confiscation, and it is impossible not to note that this zeal is most conspicuously intense in those who are without zeal for the war itself. Even though most rigorous taxation, even the so-called "conscription of wealth," should be held desirable, there is no good reason for such haste in imposing the burden. Its most drastic features might well await the other adjustments and the ascertainment of the actual cost to be met.

Moreover, it is wholly wrong and utterly misleading to consider that because experience shows that the man who is in debt to other men may be subject to discomfort, therefore a nation cannot with comfort be indebted to some of its citizens. The national debt of Great Britain began in 1692 with an issue of obligations having the face value of \$5,000,000 (£1,000,000) to help meet the cost of war with Louis XIV. This indebtedness grew with every recurring war, mounting quite as rapidly during the period of Napoleon's wars as in the war of Wilhelm II. Lord Macaulay has said (in his *History of England*):

"At every stage in the growth of that debt it has been seriously asserted by wise men that bankruptcy and ruin were at hand. Yet still the debt went on growing; and still bankruptcy and ruin were as remote as ever \* \* \* The beggared, the bankrupt society, not only proved able to meet all its obligations but, while meeting those obligations, grew richer and richer so fast that the growth could almost be discerned by the eye \* \* \* the prophets of evil were under a double delusion. They erroneously imagined that there was an exact

analogy between the case of an individual who is in debt to another individual and the case of a society which is in debt to a part of itself; and this analogy led them into endless mistakes about the system of funding. They were under an error not less serious touching the resources of the country. They made no allowance for the effect produced by the incessant progress of every experimental science, and by the incessant efforts of every man to get on in life. They saw that the debt grew, and they forgot that other things grew as well as the debt."

It is believed that on close analysis it will be discovered that a national debt contributes directly and largely to progress in that the interest payments are made to the more frugal fraction of society and in consequence are, to a very large extent, saved and added to capital—that is to say, these payments are not exchanged directly for goods for immediate consumption but are used to augment the stock of tools and machinery and so made available to lighten toil and to increase its productivity.

#### RECOMMENDATIONS.

The experiences which have been outlined and the principles a national debt contributes directly and largely to progress in financial policies of the United States in the present emergency. The following recommendations are offered in the belief that their adoption would accomplish the following:

1. Conserve and strengthen the financial resources of the country to the end that they would remain potent during the longest possible period.
2. Effect the minimum diminution of the country's store of capital.
3. Leave the American people at the close of the struggle in the strongest possible position for the resumption of the normal activities of peace.

These recommendations are not considered to be exhaustive; they are illustrative and tentative rather than complete and definitive.

1. *Loans.* During the first two years of warfare, financing by means of loans should extend to as large a share as practicable of the war expenses, interest on war debt being always provided for by additional taxation, and the issue of obligations not being permitted to exceed the amounts marketable upon reasonable conditions as to rate of interest and prices realized. All bonds should be subject to call in whole or in part (by lot) at par on any interest date after, say, five years from the date

of issue, and there should be no premiums to large or small investors in the form of special exemptions from taxation (the constitutional exemption from state and municipal taxation should be all-sufficient). The great merit of the reliance upon loans here suggested is that it leaves as long as possible the undiminished power of drastic taxation as the basis of credit and as the source of financial power gradually to be invoked if warfare is unexpectedly continued and ultimately to be relied upon should borrowing become impracticable. It does not involve the necessity of passing to a future generation an heavy war debt, for it leaves to the present generation the option of financing the war by taxation to be imposed immediately at its close when the amounts to be raised are definitely ascertained and a plan of taxation can be formulated with full knowledge and recognition of the purposes that the plan must be made to accomplish. It is not, of course, intended to suggest that taxation should not be at all increased, and, above all, there is no objection to the adoption of well-conceived taxes upon "war profits."

2. *Taxation.* That portion of the cost of war not provided for in the manner suggested in the preceding paragraph and all interest on war debt, with a liberal margin on the side of safety, must and should be provided for by taxation. The large amounts to be raised will compel some increases in the taxes upon incomes, including the surtaxes and some taxation on "war profits." The imposition of taxes under these heads should be gradual; drastic rates ought not to be enforced at the outset, but, starting with moderate additions to the present rates in the case of incomes and with proportionate rates in the case of war profits, there should be left opportunity for progressive increases in these rates as the necessities for tax revenues increase with the continuance of the war. Having originally formulated a sound system of taxation, nothing is simpler than progressive adjustments of the rates to increasing requirements, and such a system would relieve industry from the shock of the sudden application of extraordinarily high rates, permitting gradual adaptations to the governmental exactions, but it should never be forgotten that a principal purpose of war taxation should be to eliminate waste, to encourage frugality. The taxes on incomes and profits have just the opposite tendency—they draw directly from savings, and they place a severe discount upon efficiency and frugality. Moreover, in considering taxation of this character, it will not do to overlook

the especial burdens which war lays upon all industry in (1) the restricted opportunity to obtain needed capital arising from governmental competition for funds, (2) the high rates of interest that usually result from the same cause, (3) the enormously advanced rates of wages, (4) the greatly advanced cost of and enhanced difficulty of obtaining raw materials and other supplies, and (5) the diminished value to investors of amounts equal to those formerly paid in dividends and interest.

Consumption and occupation taxes are the taxes that tend toward the economy which President Wilson and all authorities worthy of regard so strongly insist upon. Heavy taxes upon coffee, tea, sugar; stamp taxes on all purchases over a small minimum and on admissions to all places of recreation and amusement would enforce the lessons of economy in every household. Automobiles, gasoline and rubber tires should be heavily taxed. Taxes on occupations which are not productive, especially those of males, would tend to limit extravagance and to divert the labor involved to more profitable employments. Of 30,091,564 males and 8,075,772 females employed in more or less gainful occupations in the United States in 1910, there are many who might in times of war be differently employed with greater benefit to the whole people. Taxes laid upon occupations which unnecessarily absorb labor, especially male labor, would shift many of them to more useful employments.

The foregoing recommendations are based largely upon the record of British experience, and they are submitted in the belief that if adopted they would avoid the conditions that now exist in the United Kingdom, namely, (1) the continuance of woeful waste and self-indulgence on the part of the great masses of the population and (2) the substantial exhaustion of the power to tax before the end of the third year of the war, so that it has no longer been considered practicable to support new loans by new taxes adequate to meet the added interest.

The period, manifestly of indefinite duration, which is just commencing for the people of this nation, will inevitably be one of trial and privation, of losses in values heretofore considered intrinsic and firmly established. Enterprises in process of development will, while it lasts, languish, because the funds needed for growth are being absorbed by the Government and blown away in cannon. Private energy and frugality will be discouraged, because its personal benefits will be largely confiscated for similar purposes. Sound men will be withdrawn from useful and peaceful lives to return broken and mangled

or not to return at all. The immense burden which this generation has assumed must not be made greater by short-sighted and dangerous financial policies. The power of America to find supplies and to fight to the end must not be diminished by efforts to load the whole financial cost of the war upon the few.

#### BORROWING POWER OF THE UNITED STATES.

It should not be forgotten that the United States are exceptionally fortunate in having a relatively low national debt and being in consequence so situated that they can readily resort for war purposes to the use of credit in almost any extent. The following comparisons relate to the latest pre-war period for which data are available and are significant:

|                           | National debt at beginning of war. <sup>1</sup> | Average per capita of population. |                                     |
|---------------------------|-------------------------------------------------|-----------------------------------|-------------------------------------|
|                           |                                                 | National debt.                    | Interest on national debt (annual). |
| Great Britain....         | \$3,443,799,000                                 | \$74.81                           | \$2.59                              |
| France.....               | 6,346,129,000                                   | 160.25                            | 6.37                                |
| Russia.....               | 4,536,939,000                                   | 26.70                             | 1.22                                |
| Italy.....                | 2,921,153,000                                   | 82.89                             | 2.85                                |
| Belgium.....              | 825,518,000                                     | 108.07                            | 5.50                                |
| Serbia.....               | 126,232,000                                     | 27.31                             | 1.35                                |
| Roumania.....             | 316,693,000                                     | 41.66                             | 2.31                                |
| Total Entente powers..... | \$18,516,463,000                                |                                   |                                     |
| Germany.....              | \$5,048,847,000                                 | \$75.55                           | \$3.41                              |
| Austria-Hungary           | 3,897,894,000                                   |                                   |                                     |
| Turkey.....               | 675,654,000                                     | 32.80                             | 3.12                                |
| Bulgaria.....             | 176,554,000                                     | 37.04                             | 2.96                                |
| Total Central powers..... | \$9,798,949,000                                 |                                   |                                     |
| Grand total....           | \$28,315,412,000                                |                                   |                                     |

(1) Not including colonies and dependencies.

Compared with the foregoing, the pre-war national debt of the United States was \$1,103,665,000, an average of \$11.03 per capita, and the annual interest charge thereon was at the average rate of 23 cents per capita.

## APPENDIX.

1. *National Wealth and War Expenditures.*

Estimates of national wealth and income are notoriously rough and inexact, but comparisons between these data and war expenditure will serve to throw some light upon the far-reaching consequences that may be expected. In the following table war expenses to December 31, 1916, are compared with estimates of national wealth:

|                               | National wealth.  | War expense to end of 1916. |                     |
|-------------------------------|-------------------|-----------------------------|---------------------|
|                               |                   | Amount.                     | Per cent of wealth. |
| Great Britain'.....           | \$90,000,000,000  | \$14,374,000,000            | 15.97               |
| France.....                   | 65,000,000,000    | 12,200,000,000              | 18.77               |
| Russia.....                   | 60,000,000,000    | 8,500,000,000               | 14.17               |
| Italy.....                    | 35,000,000,000    | 4,000,000,000               | 11.43               |
| Belgium and Serbia.....       | 13,750,000,000    | 820,000,000                 | 5.96                |
| Portugal and Roumania..       | 7,500,000,000     | 250,000,000                 | 3.33                |
| Total for Entente Powers..... | \$271,250,000,000 | \$40,144,000,000            | 14.80               |
| Germany.....                  | \$80,000,000,000  | \$14,600,000,000            | 18.25               |
| Austria-Hungary.....          | 45,000,000,000    | 5,000,000,000               | 11.11               |
| Turkey and Bulgaria....       | 8,750,000,000     | 1,025,000,000               | 11.71               |
| Total for Central Powers..... | \$133,750,000,000 | \$20,625,000,000            | 15.42               |
| Grand Total.....              | \$405,000,000,000 | \$60,769,000,000            | 15.00               |

'Not including colonies and dependencies.

Does not include anything for expenses of Portugal.

2. *National Income and War Expenses.*

Comparisons with gross national income—that is to say, with the value of all articles and services produced, plus interest on capital invested in other countries and less income paid for the use of foreign capital, follow:

|                               | Annual national income. | Average annual war expenses from August 1, 1914, to December 31, 1916. |                     |
|-------------------------------|-------------------------|------------------------------------------------------------------------|---------------------|
|                               |                         | Amount.                                                                | Per cent of income. |
| Great Britain'.....           | \$11,250,000,000        | \$5,947,900,000                                                        | 52.87               |
| France.....                   | 7,500,000,000           | 5,048,300,000                                                          | 67.31               |
| Russia.....                   | 7,500,000,000           | 3,517,200,000                                                          | 46.90               |
| Italy.....                    | 4,250,000,000           | 1,655,200,000                                                          | 38.95               |
| Belgium and Serbia.....       | 1,750,000,000           | 339,300,000                                                            | 19.38               |
| Roumania.....                 | 600,000,000             | 108,450,000                                                            | 17.24               |
| Total for Entente Powers..... | \$32,850,000,000        | \$16,611,350,000                                                       | 50.57               |
| Germany.....                  | \$10,500,000,000        | \$6,041,400,000                                                        | 57.54               |
| Austria-Hungary.....          | 6,000,000,000           | 2,069,000,000                                                          | 34.48               |
| Turkey and Bulgaria...        | 1,000,000,000           | 424,140,000                                                            | 42.41               |
| Total for Central Powers..... | \$17,500,000,000        | \$8,534,540,000                                                        | 48.77               |
| Grand Total.....              | \$50,350,000,000        | \$25,145,890,000                                                       | 49.94               |

'Not including colonies and dependencies.

It is considered that the large proportion of the usual income devoted to war purposes by certain nations, as compared with others, is evidence more of the superiority of their relatively highly organized financial systems than of reluctance on the part of those showing smaller proportions to contribute as much as practicable.

3. *National Savings and War Expenses.*

Comparison with annual savings—that is to say, with the annual additions made to the volume of capital—may also be made.

|                                    | Annual savings. | Average annual war expenses<br>from Aug. 1, 1914, to<br>Dec. 31, 1916. |                                   |
|------------------------------------|-----------------|------------------------------------------------------------------------|-----------------------------------|
|                                    |                 | Amount.                                                                | Per cent of<br>annual<br>savings. |
| Great Britain <sup>(1)</sup> ..... | \$1,875,000,000 | \$5,947,900,000                                                        | 317.22                            |
| France.....                        | 1,250,000,000   | 5,048,300,000                                                          | 403.86                            |
| Russia.....                        | 1,250,000,000   | 3,517,200,000                                                          | 281.38                            |
| Italy.....                         | 625,000,000     | 1,655,200,000                                                          | 264.63                            |
| Belgium and Serbia.....            | 300,000,000     | 339,300,000                                                            | 113.10                            |
| Roumania.....                      | 100,000,000     | 108,450,000                                                            | 108.45                            |
| Total for Entente<br>Powers.....   | \$5,400,000,000 | \$16,611,350,000                                                       | 307.62                            |
| Germany.....                       | \$1,750,000,000 | \$6,041,400,000                                                        | 345.22                            |
| Austria-Hungary.....               | 1,000,000,000   | 2,069,000,000                                                          | 206.90                            |
| Turkey and Bulgaria.....           | 150,000,000     | 424,140,000                                                            | 282.76                            |
| Total for Central<br>Powers.....   | \$2,900,000,000 | \$8,534,540,000                                                        | 294.29                            |
| Grand Total.....                   | \$8,300,000,000 | \$25,145,890,000                                                       | 302.96                            |

(1) Not including colonies and dependencies.

26470

**END OF  
TITLE**